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EXAMINER

MCCLELLAND, KIMBERLY KEIL

ART UNIT

PAPER NUMBER

1734

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/736,185	<b>Applicant(s)</b> SUGINO, NOBUO	
	<b>Examiner</b> Kimberly K. McClelland	<b>Art Unit</b> 1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 November 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2,3,13-20,22-26 and 29-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-3, 13-20, 22-26, and 29-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 3 and 39-41 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,440,590 to Collins et al.

3. With respect to claim 3, Collins et al. discloses a method of manufacturing signs, including applying an adhesive to an upper surface of a pattern (column 5, lines 31-37), the pattern having been formed on a transfer sheet by copying or printing (column 3, lines 18-19), the adhesive having a surface tension such that the adhesive moves smoothly on the upper surface of the pattern (column 5, lines 31-37), the adhesive being one of a hot-melt adhesive, water-soluble, or alcohol soluble adhesive (column 4, lines 12-24); transferring the pattern to a substrate by applying pressure or heat (column 1, line 67-column 2, line 2), wherein one or more patterns can be transferred on a substrate and wherein the patterns are adapted to be able to overlay on one another on the substrate (column 3, lines 32-35); and forming one or more coating layers on the transferred pattern after the transfer step is carried out, wherein the one or more coating layers are one of a transparent and a colored coating liquid; and one of said one or more coating layers is in direct contact with said transferred pattern (column 2, lines 3-10).

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4. As to claim 39, Collins et al. discloses providing a liner sheet (i.e. support film; column 3, lines 6-13); applying a remover layer on said liner sheet to form a transfer sheet comprising said liner sheet and said remover layer, said remover layer being in direct contact with said liner sheet (i.e. column 3, lines 14-15); forming a pattern on said remover layer by copying or printing, said pattern comprising a first surface being in direct contact with said remover layer (column 3, lines 18-19); applying an adhesive to a second surface of said pattern (column 5, lines 31-37); contacting said adhesive to a substrate and applying heat or pressure to said transfer sheet (column 1, line 67-column 2, line 2); removing said transfer sheet from said pattern to thereby leave said adhesive and said pattern on said substrate (column 2, lines 2-4).

5. As to claim 40, Collins et al. discloses applying a protective coating on the first surface of the pattern (column 2, lines 3-10).

6. As to claim 41, Collins et al. discloses the protective coating is in direct contact with the first surface of the pattern (column 2, lines 3-10).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,440,590 to Collins et al. as applied to claims 3 and 39-41 above, and in further view of U.S. Patent No. 3,131,106 to MacKenzie.

10. With respect to claim 2, Collins et al. discloses a method of manufacturing signs, including the adhesive layer is soluble (column 4, lines 25-32) and is capable of being colored with paint. However, Collins et al. does not specifically disclose a water-soluble or alcohol soluble adhesive.

11. MacKenzie discloses a similar method of transferring indicia, in which a water-soluble adhesive is coated over the transfer indicia (column 5, lines 10-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a water-soluble adhesive, such as the one taught by MacKenzie in the method of manufacturing signs disclosed by Collins et al. The motivation would have been to allow for easy removal of excess adhesive after the transfer, producing a clean finish (Collins et al; column 4, lines 25-32).

12. Claims 13, 15-18, 25, and 29-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,440,590 to Collins et al. as applied to claims 3 and 39-41 above, and further in view of U.S. Patent No. 3,334,003 to Edwards.

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13. With respect to claim 13, Collins et al. a method of manufacturing signs, including applying an adhesive to an upper surface of a pattern (column 2, lines 37-46), the pattern having been formed on a transfer sheet by copying or printing (column 3, lines 18-19); and transferring the pattern to a substrate by applying heat or pressure (column 1, line 67-column 2, line 2); and forming one or more coating layers on the transferred pattern after the transfer step is carried out, wherein one of said one or more coating layers is in direct contact with said transferred pattern (column 2, lines 3-10). However, Collins et al. does not disclose applying the adhesive with a brush.

14. Edwards discloses a similar method of transferring images, including the using a brush to apply an adhesive to the image to be transferred (See Figure 2; column 4, lines 51-56). It would have been obvious to one of ordinary skill in the art to combine the brushing step of Edwards for the adhesive coating step in the method disclosed by Collins et al. The motivation would have been to smoothly coat the adhesive on the image in a desired thickness (column 4, lines 74-75).

15. As to claim 15, Collins et al. discloses a surface tension of the upper surface of the pattern is larger than the surface tension of water (i.e. dried; column 5, lines 4-5).

16. As to claim 16, Collins et al. discloses the adhesive moves smoothly on the upper surface of the pattern because of a surface tension of the adhesive (column 2, lines 37-46).

17. As to claim 17, Collins et al. discloses the transfer sheet comprises a remover layer on which the pattern is formed and the remover layer and adhesive are adapted such that the adhesive slips off the remover layer (column 3, lines 14-15).

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18. As to claim 18, Collins et al. discloses over-transferring a pattern on another pattern (column 3, lines 32-35).

19. As to claim 25, Collins et al. discloses one or more coating layers are colored (column 2, lines 3-10).

20. As to claim 29, Collins et al. discloses said adhesive is applied to an upper surface of said pattern before said transferring of said pattern to said substrate (column 2, lines 37-46), and said adhesive which has already been applied to said upper surface of said pattern is directly contacted with said substrate to thereby obtain said transferring of said pattern to said substrate (column 1, line 67-column 2, line 2).

21. As to claim 30, Collins et al. discloses substrate is free of adhesive before said pattern is transferred to said substrate (column 4, lines 39-42).

22. As to claim 31, Collins et al. discloses the transfer sheet comprises a remover layer and a liner sheet, said remover layer being a remover sheet that is applied to said liner sheet (column 3, lines 18-19).

23. As to claim 32, Collins et al. a method of manufacturing signs, including providing a remover layer and a liner sheet (column 3, lines 14-15). However, Collins et al. does not specifically disclose said remover layer being a remover layer that is sprayed on said liner sheet.

24. Edwards discloses a similar method of transferring images, including said remover layer being a remover layer that is sprayed on said liner sheet (See Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the spraying technique taught by Edwards with the remover layer

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on the transfer sheet disclosed by Collins et al. The motivation would have been to evenly coat the base transfer sheet.

25. As to claim 33, Collins et al. discloses said pattern comprises one or more separate designs printed or copied onto one transfer sheet, and said one or more designs are transferred sequentially to said substrate (column 3, lines 32-35).

26. As to claim 34, Collins et al. discloses said pattern comprises resin toner (i.e. thermosetting polymeric materials; column 3, lines 20-24).

27. As to claim 35, Collins et al. discloses said one or more coating layers are applied on said transferred pattern as a liquid (column 2, lines 3-10).

28. As to claim 36, Collins et al. discloses said transferring comprises applying said pattern to said substrate and subsequently separating said transfer sheet from said pattern (column 2, lines 2-4).

29. As to claim 37, Collins et al. discloses forming a pattern on a transfer sheet by copying or printing (column 3, lines 18-19); applying an adhesive to a first surface of said pattern, said first surface of said pattern facing away from said transfer sheet (column 2, lines 38-46); transferring said pattern to said substrate by applying heat or pressure, said transferring consisting of applying said pattern to said substrate to thereby adhere said pattern to said substrate with said adhesive, and subsequently separating said transfer sheet from said pattern (column 1, line 67-column 2, line 4); and forming one or more coating layers on said pattern after separating said transfer sheet from said pattern (column 2, lines 3-10). However, Collins et al. does not disclose applying the adhesive with a brush.



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30. Edwards discloses a similar method of transferring images, including the using a brush to apply an adhesive to the image to be transferred (See Figure 2; column 4, lines 51-56). It would have been obvious to one of ordinary skill in the art to combine the brushing step of Edwards for the adhesive coating step in the method disclosed by Collins et al. The motivation would have been to smoothly coat the adhesive on the image in a desired thickness (column 4, lines 74-75).

31. As to claim 38, Collins et al. discloses said transfer sheet consists of a liner sheet and a remover layer (column 3, lines 14-15).

32. Claims 14 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,440,590 to Collins et al. in view of U.S. Patent No. 3,334,003 to Edwards as applied to claims 13, 15-18, 25, 29-31, and 33-37 above, and further in view of U.S. Patent No. 6,582,803 to Cole et al.

33. With respect to claim 14, Collins et al. discloses a method of manufacturing signs, including transferring the image with heat and pressure (column 2, lines 67-68). However, Collins et al. does not specifically disclose using an iron during the transfer process.

34. Cole et al. disclosed a method of thermally transferring images, including using an iron to provide heat and pressure during the transfer process (column 3, lines 4-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the heat and pressure means taught by Cole et al. with the method of

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manufacturing signs disclosed by Collins et al. The motivation would have been to allow consumers to transfer images with a hand iron (column 1, lines 30-32).

35. As to claim 23, Collins et al. does not disclose cutting a portion of the transfer sheet with a pair of scissors, said cutting being done before said pattern is transferred to said substrate.

36. Cole et al. discloses a method of thermally transferring images, including cutting a portion of the transfer sheet with a pair of scissors, said cutting being done before said pattern is transferred to said substrate (column 5, lines 5-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cutting step taught by Cole et al. with the method of making signs disclosed by Collins et al. The motivation would have been to transfer only a portion of an image to a substrate (column 5, lines 5-6).

37. As to claim 24, Collins et al. does not disclose said portion of said transfer sheet includes the pattern to be transferred.

38. Cole et al. discloses a method of thermally transferring images, including said portion of said transfer sheet includes the pattern to be transferred (column 5, lines 5-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cutting step taught by Cole et al. with the method of making signs disclosed by Collins et al. The motivation would have been to transfer only a portion of an image to a substrate (column 5, lines 5-6).

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39. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,440,590 to Collins et al. in view of U.S. Patent No. 3,334,003 to Edwards as applied to claims 13, 15-18, 25, 29-31, and 33-37 above, and further in view of U.S. Patent No. 5,589,434 to Takahara et al.

40. With respect to claim 19, Collins et al. discloses a method of manufacturing signs, including applying an adhesive to an upper surface of a pattern (column 2, lines 38-46). However, Collins et al. does not disclose coloring the adhesive with paint.

41. Takahara et al. discloses a similar image transfer method, including coloring the adhesive with paint (column 18, lines 57-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add paint to the adhesive as taught by Takahara in the method of making signs as disclosed in Collins et al. The motivation would have been to improve brightness of the image (column 18, lines 57-67).

42. As to claim 20, Collins et al. discloses a method of manufacturing signs, including applying an adhesive to an upper surface of a pattern (column 2, lines 38-46).

However, Collins et al. does not disclose coloring the adhesive to be white.

43. Takahara et al. discloses a similar image transfer method, including coloring the adhesive to be white (column 18, lines 57-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to color the adhesive white as taught by Takahara in the method of making signs as disclosed in Collins et al. The motivation would have been to improve brightness of the image (column 18, lines 57-67).

44. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,440,590 to Collins et al. in view of U.S. Patent No. 3,334,003 to Edwards and in view of U.S. Patent No. 5,589,434 to Takahara et al. as applied to claims 19-20 above, and further in view of U.S. Patent Application Publication No. 2003/0121606 to Damico et al.

45. With respect to claim 22, Collins et al. discloses a method of manufacturing signs, including mixing the adhesive prior to application onto the transfer pattern (column 5, lines 26-30). However, Collins et al. does not specifically disclose mixing the adhesive with a brush.

46. Damico et al. discloses a method of making an adhesive, including mixing may be performed with a brush (See paragraph 0041). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a conventional method of mixing/applying adhesive, such as by using a paint brush as taught by Damico et al. The motivation would have been to effectively mix the adhesive.

47. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,440,590 to Collins et al. in view of U.S. Patent No. 3,334,003 to Edwards as applied to claims 13, 15-18, 25, 29-31, and 33-37 above, and further in view of U.S. Patent No. 5,589,434 to Takahara et al., U.S. Patent Application Publication No. 2003/0121606 to Damico et al., and U.S. Patent No. 6,582,803 to Cole et al.

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48. With respect to claim 26, Collins et al. discloses a method of making signs, including over-transferring a pattern on another pattern (column 3, lines 32-35); the transfer sheet comprises a remover layer on which the pattern is formed (column 3, lines 14-15), the surface tension of the upper surface of the pattern is larger than the surface tension of water (i.e. dried; column 5, lines 4-5), and said copying or printing is done with a resin toner (i.e. thermosetting polymeric materials; column 3, lines 20-24).

49. However, Collins et al. does not specifically disclose coloring the adhesive to be white by mixing the adhesive and white paint with a brush; cutting a portion of the transfer sheet with a pair of scissors, said cutting being done before said pattern is transferred to said substrate and said portion of said transfer sheet including the pattern to be transferred, the heat is applied by an iron, said remover layer has been formed by spraying, and said adhesive is one of acrylic pressure sensitive adhesive, polyvinyl acetate adhesive, chloroprene rubber adhesive, polyvinyl chloride adhesive, or silicon rubber adhesive.

50. Takahara et al. discloses a similar image transfer method, including coloring the adhesive with paint to be white (column 18, lines 57-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to color the adhesive white as taught by Takahara in the method of making signs as disclosed in Collins et al. The motivation would have been to improve brightness of the image (column 18, lines 57-67).

51. Damico et al. discloses a method of making an adhesive, including mixing may be performed with a brush (See paragraph 0041). It would have been obvious to one of

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ordinary skill in the art at the time the invention was made to use a conventional method of mixing/applying adhesive, such as by using a paint brush as taught by Damico et al. The motivation would have been to effectively mix the adhesive.

52. Cole et al. discloses a method of thermally transferring images, including cutting a portion of the transfer sheet with a pair of scissors, said cutting being done before said pattern is transferred to said substrate (column 5, lines 5-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cutting step taught by Cole et al. with the method of making signs disclosed by Collins et al. The motivation would have been to transfer only a portion of an image to a substrate (column 5, lines 5-6).

53. Cole et al. discloses a method of thermally transferring images, including said portion of said transfer sheet includes the pattern to be transferred (column 5, lines 5-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cutting step taught by Cole et al. with the method of making signs disclosed by Collins et al. The motivation would have been to transfer only a portion of an image to a substrate (column 5, lines 5-6).

54. Edwards discloses a similar method of transferring images, including said remover layer being a remover layer that is sprayed on said liner sheet (See Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the spraying technique taught by Edwards with the remover layer on the transfer sheet disclosed by Collins et al. The motivation would have been to evenly coat the base transfer sheet.

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55. Takahara et al. discloses a similar image transfer method, including said adhesive is one of acrylic pressure sensitive adhesive, polyvinyl acetate adhesive, chloroprene rubber adhesive, polyvinyl chloride adhesive, or silicon rubber adhesive (column 9, lines 49-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the adhesive taught by Takahara et al. for the adhesive used in the method of Collins et al. The motivation would have been to use an adhesive that provides good adhesion property at the time of heating (column 9, lines 50-51).

56. Claims 13, 15-18, 29-30, and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 1,897,875 to Werner in view of U.S. Patent No. 3,334,003 to Edwards.

57. With respect to claim 13, Werner a process for transferring prints, including applying an adhesive to an upper surface of a pattern (column 1, lines 37-42), the pattern having been formed on a transfer sheet by copying or printing (column 1, lines 36-38); and transferring the pattern to a substrate by applying heat or pressure (See Figure 1); and forming one or more coating layers on the transferred pattern after the transfer step is carried out, wherein one of said one or more coating layers is in direct contact with said transferred pattern (column 2, lines 53-57). However, Werner does not disclose applying the adhesive with a brush.

58. Edwards discloses a similar method of transferring images, including the using a brush to apply an adhesive to the image to be transferred (See Figure 2; column 4, lines

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51-56). It would have been obvious to one of ordinary skill in the art to combine the brushing step of Edwards for the adhesive coating step in the method disclosed by Werner. The motivation would have been to smoothly coat the adhesive on the image in a desired thickness (column 4, lines 74-75).

59. As to claim 15, Werner discloses a surface tension of the upper surface of the pattern is larger than the surface tension of water (i.e. which are rubbed; column 1, lines 36-42).

60. As to claim 16, Werner discloses the adhesive moves smoothly on the upper surface of the pattern because of a surface tension of the adhesive (i.e. solution; column 1, lines 36-42).

61. As to claim 17, Werner discloses the transfer sheet comprises a remover layer on which the pattern is formed and the remover layer and adhesive are adapted such that the adhesive slips off the remover layer (See Figures 1-2).

62. As to claim 18, Werner discloses over-transferring a pattern on another pattern (column 1, lines 1-2).

63. As to claim 29, Werner discloses said adhesive is applied to an upper surface of said pattern before said transferring of said pattern to said substrate, and said adhesive which has already been applied to said upper surface of said pattern is directly contacted with said substrate to thereby obtain said transferring of said pattern to said substrate (See Figure 1).

64. As to claim 30, Werner discloses substrate is free of adhesive before said pattern is transferred to said substrate (See Figure 1).



65. As to claim 33, Werner discloses said pattern comprises one or more separate designs printed or copied onto one transfer sheet, and said one or more designs are transferred sequentially to said substrate (column 1, lines 1-2).

66. As to claim 34, Werner discloses said pattern comprises resin toner (i.e. printing colors; column 1, lines 36-42).

67. As to claim 35, Werner discloses said one or more coating layers are applied on said transferred pattern as a liquid (column 2, lines 53-57).

68. As to claim 36, Werner discloses said transferring comprises applying said pattern to said substrate and subsequently separating said transfer sheet from said pattern (See Figure 2):

69. As to claim 37, Werner discloses forming a pattern on a transfer sheet by copying or printing (column 1, lines 1-2); applying an adhesive to a first surface of said pattern, said first surface of said pattern facing away from said transfer sheet (See Figure 1); transferring said pattern to said substrate by applying heat or pressure, said transferring consisting of applying said pattern to said substrate to thereby adhere said pattern to said substrate with said adhesive, and subsequently separating said transfer sheet from said pattern (column 1, lines 43-51); and forming one or more coating layers on said pattern after separating said transfer sheet from said pattern (column 2, lines 53-57). However, Werner does not disclose applying the adhesive with a brush.

70. Edwards discloses a similar method of transferring images, including the using a brush to apply an adhesive to the image to be transferred (See Figure 2; column 4, lines 51-56). It would have been obvious to one of ordinary skill in the art to combine the

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brushing step of Edwards for the adhesive coating step in the method disclosed by Werner. The motivation would have been to smoothly coat the adhesive on the image in a desired thickness (column 4, lines 74-75).

71. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 1,897,875 to Werner in view of U.S. Patent No. 3,334,003 to Edwards as applied to claims 13, 15-18, 29-30, and 33-37 above, and further in view of U.S. Patent No. 5,589,434 to Takahara et al.

72. With respect to claim 19, Werner discloses a method of transferring images, including applying an adhesive to an upper surface of a pattern (See Figure 1). However, Werner does not disclose coloring the adhesive with paint.

73. Takahara et al. discloses a similar image transfer method, including coloring the adhesive with paint (column 18, lines 57-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add paint to the adhesive as taught by Takahara in the method of transferring images as disclosed in Werner. The motivation would have been to improve brightness of the image (column 18, lines 57-67).

74. As to claim 20, Werner discloses a method of manufacturing signs, including applying an adhesive to an upper surface of a pattern (See Figure 1). However, Werner does not disclose coloring the adhesive to be white.

75. Takahara et al. discloses a similar image transfer method, including coloring the adhesive to be white (column 18, lines 57-67). It would have been obvious to one of

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ordinary skill in the art at the time the invention was made to color the adhesive white as taught by Takahara in the method of transferring images as disclosed in Werner. The motivation would have been to improve brightness of the image (column 18, lines 57-67).

76. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 1,897,875 to Werner in view of U.S. Patent No. 3,334,003 to Edwards and in view of U.S. Patent No. 5,589,434 to Takahara et al. as applied to claims 19-20 above, and further in view of U.S. Patent Application Publication No. 2003/0121606 to Damico et al.

77. With respect to claim 22, Werner discloses a process for transferring prints, including mixing the adhesive prior to application onto the transfer pattern (i.e. solution; column 1, lines 36-42). However, Werner does not specifically disclose mixing the adhesive with a brush.

78. Damico et al. discloses a method of making an adhesive, including mixing may be performed with a brush (See paragraph 0041). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a conventional method of mixing/applying adhesive, such as by using a paint brush as taught by Damico et al. The motivation would have been to effectively mix the adhesive.

79. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 1,897,875 to Werner in view of U.S. Patent No. 3,334,003 to Edwards as

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applied to claims 13, 15-18, 25, 29-31, and 33-37 above, and further in view of U.S.

Patent No. 5,589,434 to Takahara et al., U.S. Patent Application Publication No.

2003/0121606 to Damico et al., and U.S. Patent No. 6,582,803 to Cole et al.

80. With respect to claim 26, Werner discloses a process for transferring prints, including over-transferring a pattern on another pattern (column 1, lines 1-2); the transfer sheet comprises a remover layer on which the pattern is formed (See Figure 1), the surface tension of the upper surface of the pattern is larger than the surface tension of water (i.e. which are rubbed; column 1, lines 36-42), and said copying or printing is done with a resin toner (i.e. printing colors; column 1, lines 36-42).

81. However, Werner does not specifically disclose coloring the adhesive to be white by mixing the adhesive and white paint with a brush; cutting a portion of the transfer sheet with a pair of scissors, said cutting being done before said pattern is transferred to said substrate and said portion of said transfer sheet including the pattern to be transferred, the heat is applied by an iron, said remover layer has been formed by spraying, and said adhesive is one of acrylic pressure sensitive adhesive, polyvinyl acetate adhesive, chloroprene rubber adhesive, polyvinyl chloride adhesive, or silicon rubber adhesive.

82. Takahara et al. discloses a similar image transfer method, including coloring the adhesive with paint to be white (column 18, lines 57-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to color the adhesive white as taught by Takahara in the process for transferring prints as disclosed in

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Werner. The motivation would have been to improve brightness of the image (column 18, lines 57-67).

83. Damico et al. discloses a method of making an adhesive, including mixing may be performed with a brush (See paragraph 0041). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a conventional method of mixing/applying adhesive, such as by using a paint brush as taught by Damico et al. The motivation would have been to effectively mix the adhesive.

84. Cole et al. discloses a method of thermally transferring images, including cutting a portion of the transfer sheet with a pair of scissors, said cutting being done before said pattern is transferred to said substrate (column 5, lines 5-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cutting step taught by Cole et al. with the process for transferring prints disclosed by Werner. The motivation would have been to transfer only a portion of an image to a substrate (column 5, lines 5-6).

85. Cole et al. discloses a method of thermally transferring images, including said portion of said transfer sheet includes the pattern to be transferred (column 5, lines 5-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cutting step taught by Cole et al. with the process for transferring prints disclosed by Werner. The motivation would have been to transfer only a portion of an image to a substrate (column 5, lines 5-6).

86. Edwards discloses a similar method of transferring images, including said remover layer being a remover layer that is sprayed on said liner sheet (See Figure 1).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the spraying technique taught by Edwards with the remover layer on the transfer sheet disclosed by Werner. The motivation would have been to evenly coat the base transfer sheet.

87. Takahara et al. discloses a similar image transfer method, including said adhesive is one of acrylic pressure sensitive adhesive, polyvinyl acetate adhesive, chloroprene rubber adhesive, polyvinyl chloride adhesive, or silicon rubber adhesive (column 9, lines 49-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the adhesive taught by Takahara et al. for the adhesive used in the method of Werner. The motivation would have been to use an adhesive that provides good adhesion property at the time of heating (column 9, lines 50-51).

### ***Response to Arguments***

88. Applicant's arguments with respect to claims 2-3, 13-20, 22-26, and 29-41 have been considered but are moot in view of the new ground(s) of rejection. Applicant's remaining pertinent arguments are addressed below:

89. Applicant argues on page 14 that Brault et al. does not disclose a remover sheet that is applied to a liner sheet. Examiner disagrees. The term "applied" is a broad term and must be treated as such. Coating a remover layer on a liner sheet is interpreted to meet applicant's claim language of "a remover sheet applied to a liner sheet". If applicant believes the lamination of a separate, solidified remover layer with a single

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liner sheet is patentable, then applicant is encouraged to use more specific claim language.

90. Applicant also argues that the desire to providing a more uniform coverage is not adequate motivation to combine the spraying technique of Edwards with Brault.

Examiner disagrees. The general term "coating" used in Brault is extremely broad.

Spraying is a well-known coating method that is equivalent to rolling, slot-coating, brushing, spin coating, etc. One would be motivated to use any of these coating methods by the desire to form a uniform coating, as is known in the art. Furthermore, substitution of equivalents requires no express motivation. *In re Fount*, 213 USPQ 532 (CCPA 1982); *In re Siebentritt* 152, USPQ (CCPA 1967).

91. As to applicant's argument on page 16 that Damico is nonanalogous art, examiner disagrees. Damico discloses a method of making adhesives. One of ordinary skill in the art would look to Damico for methods of making the adhesives disclosed in Collins and Werner. Consequently, this argument is not persuasive.

### **Conclusion**

92. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly K. McClelland whose telephone number is (571) 272-2372. The examiner can normally be reached on 8:00 a.m.-5 p.m. Mon-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris A. Fiorilla can be reached on (571)272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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*Kim McAllister*

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*[Signature]*